

Title (en)

GROUP III NITRIDE SEMICONDUCTOR LIGHT-EMITTING DEVICE AND METHOD FOR MANUFACTURING SAME

Title (de)

HALBLEITERLICHTEMISSIONSBAUELEMENT MIT GRUPPE-III-NITRID UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

DISPOSITIF ELECTROLUMINESCENT SEMI-CONDUCTEUR AU NITRURE DU GROUPE III ET PROCEDE PERMETTANT DE PRODUIRE CE DISPOSITIF

Publication

**EP 1553669 A1 20050713 (EN)**

Application

**EP 03808894 A 20030929**

Priority

- JP 0312406 W 20030929
- JP 2002300425 A 20021015

Abstract (en)

A Group III nitride semiconductor light-emitting element includes a crack-preventing layer 15 of n-type GaN provided between a n-type contact layer 4A/<.> and a n-type clad layer 5A, wherein the crack-preventing layer 15 has a dopant concentration lower than that of the n-type contact layer 4A.  
<IMAGE>

IPC 1-7

**H01S 5/323**

IPC 8 full level

**H01L 33/00** (2006.01); **H01L 33/06** (2010.01); **H01L 33/12** (2010.01); **H01L 33/32** (2010.01); **H01S 5/323** (2006.01); **H01S 5/343** (2006.01)

CPC (source: EP US)

**B82Y 20/00** (2013.01 - EP US); **H01S 5/34333** (2013.01 - EP US); **H01L 33/02** (2013.01 - EP US); **H01L 33/025** (2013.01 - EP US); **H01L 33/32** (2013.01 - EP US); **H01S 5/3086** (2013.01 - EP US); **H01S 5/309** (2013.01 - EP US); **H01S 2301/173** (2013.01 - EP US); **H01S 2301/18** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1553669 A1 20050713**; **EP 1553669 A4 20090923**; AU 2003266674 A1 20040504; CN 1689205 A 20051026; JP 2004140008 A 20040513; JP 3909694 B2 20070425; KR 100737339 B1 20070710; KR 20050057659 A 20050616; TW 200425535 A 20041116; TW I240429 B 20050921; US 2006081860 A1 20060420; WO 2004036708 A1 20040429

DOCDB simple family (application)

**EP 03808894 A 20030929**; AU 2003266674 A 20030929; CN 03824173 A 20030929; JP 0312406 W 20030929; JP 2002300425 A 20021015; KR 20057006599 A 20050415; TW 92127817 A 20031007; US 53032205 A 20050405